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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/600,878

06/20/2003

John Wu

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03/08/2006

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EXAMINER

HOANG, HUAN

ART UNIT

PAPER NUMBER

2827

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/600,878	Applicant(s) WUU ET AL.	
	Examiner Huan Hoang	Art Unit 2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-15 is/are allowed.
- 6) ☒ Claim(s) 1-4, 16, 20 and 23 is/are rejected.
- 7) ☒ Claim(s) 5, 17-19, 21, 22 and 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>062003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 1-5 are objected to because of the following informalities:

The word "of" should be inserted between "an output" and "the PWWTM bias generator" (claim 1, page 22, line 5). Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 16, 20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Vangal.

Vangal discloses a programmable weak write test mode bias generator, a weak write test mode-enabled static access memory system having all the elements as recited in claims 1-4 as follows:

means for generating an output signal (#32, Fig.1 and column 1, lines 19-20) at an output the PWWTM bias generator, the signal being a logic high in a default mode

(normal mode, column 1, lines 19-20), and the output signal being a bias voltage having a selectable magnitude when in a WWTM (column 1, lines 34-35).

a set of selection inputs (en0, en1, en2, Fig. 2);

the default mode logic high signal being actively maintained when the PWWTM bias generator output is connected to a load (driver 10, Fig.1).

The bias voltage generated from a current, a mode select input to select the WWTM or the default mode and the first supply voltage (V_{cc}) and the second supply voltage (V_{ss}) are inherent.

Regarding claims 16, 20 and 23. Vangal discloses the following:

an SRAM array having a weak write pull-down transistor (40, Fig. 1) and a write driver (10, Fig. 1);

means for biasing the week write pull-down transistor with a bias voltage (#32, Fig.1 and column 1, lines 19-20) the bias voltage having a voltage equivalent to a logic high level of the SRAM in a default mode (normal mode, column 1, lines 19-20) when the WWTM is not active, the bias voltage having a selectable magnitude when in the WWTM is active (column 1, lines 34-35).

Allowable Subject Matter

4. Claims 6-15 are allowed.
5. Claims 5, 17-19, 21, 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest the detailed PWWTM bias generator as recited in claims 5, 6 and 18, the sensitivity of the WWTM to sizing of the write pull-down transistor as recited in claim 17, the threshold of a detected memory failure being adjustable by selecting a magnitude from among a plurality of selectable magnitudes as recited in claim 21, the application of the logic high output signal improving a write margin of memory cells in the SRAM as recited in claim 24.

Conclusion

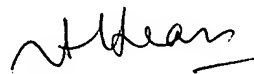
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Selvin et al. discloses a programmable week write test mode.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan Hoang whose telephone number is (571) 272-1779. The examiner can normally be reached on Tues-Fri 8:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Huan Hoang
Primary Examiner
Art Unit 2827

HH
3/5/06